Amendment to Claims

This listing of Claims will replace all prior versions and listings of claims in this Application.

Listing of Claims

I claim:

1. (CURRENTLY AMENDED) A method of making second generation halftone images lacking visible interference, comprising:

selecting an image which has been halftoned;

determining ~~the~~ a number of tone levels required for each pixel of the selected halftoned image;

arranging the number of tone levels in a set of tone levels;

identifying a high-frequency halftone cell size;

scanning the selected halftoned image to produce a second generation halftoned image;

reproducing, for each pixel in the second generation halftoned image, a pixel tone level;

selecting, from the set of tone levels, a tone level closest to the pixel tone level of each pixel in the second generation halftoned image to minimize noise generated during scanning without constructing a new halftone center;

arranging a dot growth pattern evenly across the second generation image ~~to offset initial dot growth from the center of the halftone cell by defining sub-cells and growing the dot pattern relative to the sub-cell, and~~

~~growing a dot pattern in a second generation halftone of the selected image.~~

2. (ORIGINAL) The method of claim 1 which further includes determining a sub-pixel level difference.

3. (ORIGINAL) The method of claim 2 wherein said growing includes growing the dot pattern evenly across the second generation image by setting the sub-pixel level difference to one.

4. (ORIGINAL) The method of claim 2 wherein said defining a sub-cell includes defining a cell to be a 4x4 pixel matrix, and defining a sub-cell to be a 2x2 pixel 2D matrix, having a sub-pixel level difference matrix values for each pixel in the cell and sub-cell.

5. (ORIGINAL) The method of claim 4 wherein said arranging includes scaling up the matrix values from zero to one, to zero to 255.

6. (ORIGINAL) The method of claim 1 wherein the number of tone levels is fifteen levels of gray plus white.

7. (ORIGINAL) The method of claim 1 wherein the cell size is 4x4 pixels.

8. (CURRENTLY AMENDED) A method of making second generation halftone images lacking visible interference, comprising:

selecting an image which has been halftoned;

determining ~~the~~ a number of tone levels required for each pixel of the selected

halftoned image;

arranging the number of tone levels in a set of tone levels;

identifying a high-frequency halftone cell size;

scanning the selected halftoned image to produce a second generation halftoned image;

reproducing, for each pixel in the second generation halftoned image, a pixel tone level;

selecting, from the set of tone levels, a tone level closest to the pixel tone level of each pixel in the second generation halftoned image to minimize noise generated during scanning without constructing a new halftone center;

arranging a dot growth pattern to offset initial dot growth from the center of the halftone cell by defining sub-cells and growing the dot pattern relative to the sub-cell;

determining a sub-pixel level difference; and

growing a dot pattern evenly across the ~~in a~~ second generation ~~halftone of the selected~~ halftoned image~~, including growing the dot pattern evenly across the second generation image~~ by setting the sub-pixel level difference to one while preserving dot original amplitude.

9. (ORIGINAL) The method of claim 8 wherein the number of tone levels is fifteen levels of gray plus white.

10. (ORIGINAL) The method of claim 8 wherein the cell size is 4x4 pixels.

11. (ORIGINAL) The method of claim 8 wherein said defining a sub-cell includes defining a cell to be a 4x4 pixel matrix, and defining a sub-cell to be a 2x2 pixel 2D matrix, having a sub-pixel level difference matrix values for each pixel in the cell and sub-cell.

12. (ORIGINAL) The method of claim 11 wherein said arranging includes scaling up the matrix values from zero to one, to zero to 255.